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Title: Understanding the gendered nature of weight loss surgery: insights from an Australian qualitative study.

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Abstract

Internationally, weight loss surgery is primarily undertaken by women (75%). This difference has been attributed to the appearance concerns of women which is a simplistic and unsatisfactory explanation. The study aims to explore the way gender influences the processes leading up to surgery and life after surgery providing important new insights into the differences in uptake of weight loss surgery between men and women. Ten single-gender focus groups were conducted in Australia in 2014 (Women = 32, Men = 17). Aspects of particular importance for understanding the gendered nature of weight loss surgery include different understandings of the mechanisms that contribute to weight gain, the relationship with food, experiences of having a big body and approaches to disclosure of surgery. To maximise outcomes following surgery health services and supports need to give greater consideration to the way gender influences experiences for men and women pre and post-surgery.

Key Words: obesity, gender, weight loss surgery, bariatric surgery, focus groups, Australia

Introduction

Weight loss surgery is gendered, but existing research has rarely examined the factors that contribute to this process (Welbourn et al., 2014). Traditionally, the different surgical rates have been attributed to the greater appearance concerns of women or the fact that women are more likely to be classified as severely obese (body mass index, $BMI \geq 35\text{kg/m}^2$) than men (Keating et al., 2015). While these factors may contribute to the difference in surgical rates between men and women these factors alone fail to account for the complex ways in which gender and the cultural ideals of masculinity and femininity influence individual experiences and social practices (Broom, 2009). This study of the experience of weight loss surgery utilises an embodied approach to gender differences. It provides important new insights into factors influencing the differences in uptake of weight loss surgery and the experiences following surgery for men and women.

Globally, the proportion of men and women classified as overweight or obese is comparable (36.9% compared to 38%), but more women than men are classified as obese ($BMI \geq 30\text{kg/m}^2$) (Ng et al.). Rates of weight loss surgery differ significantly according to gender with 75% of all surgical procedures undertaken internationally occurring in women (Welbourn et al., 2014). Gender differences were identified as priority research areas in the first International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO) report (Welbourn et al., 2014) and qualitative researchers have also indicated a need to include more males into studies of weight loss surgery (Temple Newhook, Gregory, & Twells, 2015). While more women are classified as severely obese and hence, potentially eligible for weight loss surgery a Canadian study of patient attrition following referral to a weight loss surgery program found that men were significantly less likely to proceed with surgery than women (Diamant et al., 2014).

Obesity is determined using Body Mass Index (BMI) which is calculated using an individual's height and weight. A BMI of between 25.0-29.9 kg/m² is classified as overweight while a BMI of over 30 kg/m² is classified as obese. For people identified as overweight or obese, advice about lifestyle modification (i.e. physical activity, nutrition and behaviour change) is recommended using a team care approach. In Australia weight loss surgery is recommended when nonsurgical approaches have failed in people with a BMI of 35-39.9 kg/m² (class 2 obesity) with an associated comorbidity or people with a BMI >40 kg/m² (class 3 obesity) (National Health and Medical Research Council, 2013). The most common forms of surgery are gastric bypass, gastric sleeve and laparoscopic gastric banding (LAGB) that aim to restrict food consumption and/or calorie absorption. Globally, rates of surgery have slowed in recent years after a period of rapid growth (Buchwald & Oien, 2013). In Australia, rates of obesity are the same for men and women (both 27.5%) (Australian Bureau of Statistics, 2013), however, women are twice as likely to be classified with class 3 obesity than men (Keating et al., 2015).

Cultural and social ideals of gender, masculinity and femininity create expectations for, and influence the form of, people's bodies (Connell, 2009). This process is dynamic and ongoing (Shilling, 2012; Turner, 2008). Men and women are socialised to differently value how they look and what they do with the bodies, focusing on how the body functions or its appearance (Shilling, 2012). In contemporary western cultures the ideal body shape for women is slim and firm (toned), with many women disliking their body size and shape (Bordo, 2003; Davis, 1995; Kwan & Trautner, 2009; Shilling, 2012). Meanwhile men are socialised to take pride in their body and its capability (Shilling, 2012). However, popular culture also idealises a male body that is strong, fit and muscular with a 'six-pack' stomach (Lupton, 2013; Monaghan, 2008).

Gender and concepts of masculinity and femininity can shape physical bodies through social practices such as sport, exercise, diet (Broom & Dixon, 2008; Fleming P.J. & Agnew-Brune C, 2015; Hunt, McCann, Gray, Mutrie, & Wyke, 2013; Warin, Turner, Moore, & Davies, 2008) and employment (Connell, 2009; Gimlin, 2007; Watson J, 2000). Food practices, such as the type and amount of food consumed are gendered with the consumption of low fat food and small meals considered feminine and the consumption of meat and larger meal sizes considered to be masculine (Carrigan, Szmigin, & Leek, 2006; Vartanian, Herman, & Polivy, 2007). In addition, health practices are gendered with studies showing that men are less likely to engage in health enhancing behaviours than women (Courtenay, 2000; Fleming P.J. & Agnew-Brune C, 2015) and are less likely to attend health services (Courtenay, 2000; Smith, Braunack-Mayer, & Wittert, 2006). Where men do attend health services they spend less time (Courtenay, 2000) and receive less advice from medical practitioners about changing disease risk factors than women (Bertakis & Azari, 2007; Courtenay, 2000).

Human experience is embedded within the body; *'the self and body are not separate, and experience, whether conscious or not, is embodied'* (Nettleton, 2006, p. 114). Embodiment, the everyday lived experience of one's body is shaped by interactions with an individual's physical and social environments (Jaye, 2004; Turner, 2008; Watson J, 2000) and is fundamentally influenced by gender and concepts of masculinity and femininity (Connell, 2009; Jaye, 2004). Embodiment cannot be reduced to cognitively oriented 'health beliefs', cultural 'discourses', or social structural and demographic variables. Rather, responses to health concerns such as obesity emerge out of the negotiated relationship between embodied experience, social factors, and cognitive beliefs and understanding (Warin et al., 2008). Exploring weight loss practices such as bariatric surgery through a gendered focus provides an opportunity to better understand how embodied social practices and relations impact on outcomes and experiences.

With the exception of a recent Canadian study that addressed the gendered meaning of weight loss surgery in the narratives of men and women undergoing surgery (Temple Newhook et al., 2015) gender has not been a focus of analysis in studies of weight loss surgery (Groven, 2014; Natvik, Gjengedal, Moltu, & Råheim, 2015; Ogden, Clementi, & Aylwin, 2006; Ogle, Park, Damhorst, & Bradley, 2015; Thomas et al., 2010; Throsby, 2007, 2008). However, studies of media portrayals and promotion of weight loss surgery found that promotion of weight loss surgery is gendered with surgery portrayed as taking responsibility for their health by men, but transformational for women (Ferris, 2003; N. M. Glenn, Champion, & Spence, 2012; Nicole M. Glenn, McGannon, & Spence, 2013). Studies with men who underwent weight loss surgery found they did conceptualised surgery as taking responsibility for themselves and those they care for (Natvik et al., 2015).

Drawing on the work of Bordo (2003), who argues that managing bodies and food through diet and exercise are normalising functions that serve to reproduce gender, Temple Newhook 2015 (p. 665), argues that women and men undergoing weight loss surgery are similarly *‘engaged in the same gendered, normalising bodily projects’*. However, Temple Newhook also argues that deciding to have surgery for weight loss is a complex process, informed by gendered embodied experiences prior to surgery, hopes for transformation, and taking responsibility for one’s health. In contrast, Budgeon (2009, p.51) argues that while traditional feminist critiques have engaged effectively with the relationship between gender and self-representation concerns they have been *‘constrained when addressing women’s embodied agency and the choices women make about embodiment, consequently failing to acknowledge that the embodied self exceeds representation’*. Budgeon proposes an approach to embodied identity that focuses on what the body can do as distinct from what bodies mean and is interested in how embodied identity is manifest through its social relations.

This approach to embodied identity with its focus on agency, and in particular, what the body can do (Budgeon, 2003) has the potential to reframe discussions and considerations of weight loss surgery as well as impact pre and post-surgical care and support. Where the body is acknowledged as being integral to the process of negotiating identity and facilitating our relationship with the world around us then weight loss surgery may be considered a mechanism for changing the way people interact with their physical and social environments rather than a response to appearance concerns. This approach is consistent with Throsby (2008, p.120), who argued that the transformation that follows weight loss surgery is not about appearance, but the '*reconfiguration of the self as a disciplined subject*'; someone who has taken responsibility for their body and regained control over their eating.

This study is part of a larger study exploring weight loss patients' expectations and experiences in Australia. This qualitative study was conducted in the Australian state of Tasmania, an island with a population of 515,000 people. There are two public hospitals and three private hospitals that conduct publicly- and privately-funded weight loss surgery (primarily LAGB). The LAGB procedure involves the insertion of a silicone belt with an inflatable balloon around the upper stomach, creating a small pouch in the upper stomach. The balloon is inflated at intervals via a small port which is inserted under the skin for ease of access (Aterburn & Courcoulas, 2014). This procedure generally requires people to stay one night in hospital and is reversible if necessary. In Tasmania over 4,000 LAGB surgeries occurred between July 2004 and July 2014 (predominantly in the private sector), the highest rate per-capita in Australia (Medicare, 2015).

In this study we extend Temple Newhook's approach drawing on Budgeon's theory. We identify the embodied practices that shape the gendered experience of weight loss surgery. The study aims to explore the way gender influences the processes leading up to surgery, the experience of surgery and life after surgery providing important new insights into the

differences in uptake of weight loss surgery between men and women. We focused on how study participants understood what their bodies could and could not do, and how this embodied experience and self-understanding shaped their desire for, and responses to, weight loss surgery. Ethics approval was granted by the University of Tasmania's Health and Medical Human Research Ethics Committee.

Methods

Recruitment

The study was advertised in three main newspapers, on radio and within the Royal Hobart Hospital, Tasmania. Using a stratified and randomised approach letters were sent to privately-funded recipients of LAGB (n=180), to publicly publicly-funded LAGB recipients (n=127) and those on the public wait list (n=185) by the Department of Health and Human Services. Additionally, bariatric surgeon [SW] provided interested and eligible patients with the study's information sheet. To ensure confidentiality, identifying details of participants were not shared between investigators.

Procedure

This study took an interpretative approach drawing on symbolic interactionism and informed by grounded theory. The study involved a series of semi-structured focus groups. Focus groups were selected as a data collection method because they are well suited to exploratory studies investigating motivations, attitudes and normative assumptions associated with the phenomenon under study (Kitzinger, 1995). At first contact prospective participants were provided with an overview of the study and general demographic (e.g. age, education) and clinical (e.g. height and weight, time since surgery) information was collected. This information informed subsequent purposive sampling of focus group participants to ensure a mix of demographic and clinical characteristics (time since surgery) in each focus group

where possible. Given the gender differences in rates of weight loss surgery focus groups were same-sex to facilitate discussion. Ten focus groups were conducted: six with women and four with men. Three groups were conducted with individuals currently on the waiting list for surgery, three where surgery was publicly funded, three where surgery was privately funded and one group with participants whose surgery was both publicly and privately funded. Groups comprised of between 2 and 8 participants.

For consistency one of the authors [MS] assisted or led all focus groups. Where practicable a moderator was also present at each focus group. The duration of each focus group was no longer than 1.5 hours. The discussion schedule focused on the reasons for taking a surgical pathway for weight management, experiences and expectations of surgery and information and support provided. Participants were also provided with details about the different surgical rates for men and women and asked to comment on the gender differences. The schedule was informed by a review of the literature and consultation with public health experts, policy makers, primary and tertiary health service professionals with experience in the management of obesity, qualitative and quantitative researchers and those with lived experience of obesity.

Data analysis

All focus groups were audio-recorded and transcribed verbatim. The transcripts were checked and de-identified by author MS. Transcripts were imported into data analysis software NVivo 10 (QSR International) to assist with data management and analysis. Preliminary thematic analysis undertaken by author MS focused on the support needs and experiences of people who had weight loss surgery and motivations for seeking surgery. Supplementary analysis of the data (Heaton, 2008) by author KJ found that discussions about the experience of obesity and weight loss surgery varied according to gender. Transcripts then underwent a process of careful reading and thematic analysis, focusing on how gender influenced the experience of

weight loss surgery (Grbich, 2007; Strauss & Corbin, 1990). Throughout this process there was reflexive consideration of the analysis and discussion between authors. Key concepts, ideas and reflections relating to gender were identified were recorded in a specific memo as well as the project log.

Results

One hundred and forty-one adults who had received surgery or who were waiting for surgery expressed interest in being involved in the study. Forty-nine participated in focus groups with the majority of study participants having undergone weight loss surgery ($n = 41$). The time since surgery ranged from less than one year to 31 years. The women were slightly younger than the men and slightly more men than women had completed a university degree (see Table 1). Participants were not questioned about their sexual orientation, gender identity or marital status.

INSERT TABLE 1 HERE

While the men and women in this study shared many common experiences related to weight loss surgery this study focused on the areas of difference, highlighting particular aspects of their experiences that may help explain the gender differences in weight loss surgery. The areas of greatest disparity between men and women in this study were in their discussions of the mechanisms underlying weight gain, experiences of living with a big body and differing social and cultural expectations including interactions with health professionals, disclosure of surgery, discussions about their relationship with food and their sense of self or identity following surgery. These aspects are presented and discussed in detail below.

Before Surgery

There were clear gendered differences in study participants' experiences prior to surgery. These included their understandings of factors that contributed to their weight gain, their

experience of living in big bodies, and how cultural and social expectations shaped these experiences, including interactions with health professionals. Their discussions also reflected the way social and cultural discourse around obesity uncritically encompass dominant concepts of masculinity and femininity with respect to acceptable body size, appearance concerns, health service use and gendered social roles in the family. These factors contribute to differences in the way in which men and women seek to manage their big bodies.

Weight gain and ones' sense of self

Many participants provided short accounts that outlined the processes they felt had contributed to them gaining weight. In these accounts men were more likely to talk about how their weight became an issue following an injury, change in employment conditions (more sedentary) or following a change in social circumstances that led to decreased physical activity. These incidents or changes led to weight gain and in turn less activity as is illustrated by one man's account of weight gain:

[I] retained [my] perfect physique up until probably I was about 30, then at 30 – playing sport - injured me knee. At the same time, I injured me knee I became manager of [service company] and sitting in the office with an injured knee I thought, “Okay I’ll have 12 months off and then I’ll start running again. But then ... the fatter I got the less I wanted to exercise. (man)

The women in this study who discuss their history of weight gain were more likely to discuss how their family's approach to food during childhood had an ongoing impact on their weight and relationship with food into adulthood.

My mother and father grew up in the war. And because food was scarce and if we didn't eat what was on our plate, dad would get very angry ... I was helping them

[siblings] to have their meals and I'd eat half of theirs so they wouldn't be punished
(woman)

The factors that men in our study emphasised were more likely to be external and situationally contingent. In contrast, the women were more likely to emphasise factors that shaped their sense of self, and as a consequence saw weight gain as a reflection of problems that were more closely bound up with their sense of self. The gendered nature of the sources of weight gain reflected gendered differences in men and women's relationships to, and experiences of, their bodies.

Living in a big body

While this study did not directly ask about experiences of stigma, men and women discussed occasions when they had experienced this when going about their daily lives. These experiences also occurred during interactions with health professionals.

Spoke to a doctor about it [difficulty weighing himself] and he said, "Oh you'll have to get the produce scales." [Laughs]. You know down at the um – down at the agricultural end. ... you know just total nonsense. (man)

Discussions included references to the stereotype of people with big bodies and the sense of being judged, including by health professionals. The women had internalised a greater sense of guilt and shame associated with their weight and eating practices and were much more likely to refer to themselves, their eating habits and their weight in a derogatory manner.

Terms used included: *'poison foods, fat and lazy, naughty, fat clothes, truck tyre, punishment, feeling like you're on trial, and sneaking junk food'*.

The biggest I've been is 130kgs, I don't want to go back up there ... I can't even bear to look in the mirror now because I see this big truck tyre and it's like – you know I cover myself up when I go surfing you know (woman)

In general, the men were much less likely to make pejorative comments directed at themselves with respect to their weight. In contrast, some men discussed how their large physical size had been an asset in the past and a positive sign of strength and masculinity facilitating participation in activities such as sport and work in a manner that was not the case for the women. When the women discussed their past involvement in sport or employment a big body size was not considered an asset that facilitated participation.

When provided with information about the different rates of surgery for men and women study participants discussed the differing cultural and social expectations for men and women with respect to body size and shape. Some participants believed that women were more concerned about their appearance than men, although this supposition was contested by some women.

No I don't agree, but I just think women – women are the nurturers. Women feel they need to be around for their kids. That was one of the big forces for me, was to be around for my grandchildren. Not have my baby grandson push me around in a wheelchair.... that was the thing that made me have it done.

All body sizes and shapes were potentially a source of pride for men.

Unless the little lady at home or one of the kids or something says you know, "Dad your gut's a bit big," um then – and I know men will very often say, "Oh it's a beer gut," and pat it as – they're proud of this – [laughter]. Hello? Where's your head? But that's sort of like a male thing and you know like if I had a beer gut I'm sure some bloke would be mentioning how bad it looked. (woman)

These comments highlighted both the influence of cultural representations ('it is expected for women'), and the shaping influence of women's choices and agency in response to their embodied experience ('not have my baby grandson push me around in a wheelchair'). The

second indicated how people's understandings of their weight emerge out of an embodied sense of self (patting a beer gut). The two processes are bound up together.

This different expectations and greater acceptance of large body sizes for men extended to participant interactions with health professionals. One of the men recounted how he was reassured that his big body was not considered unhealthy by health professionals.

Professional health people say – they say to us, “Oh you’ve got a big frame you can carry your weight well anyway.” So you know when you’re supposed to be 90 kilos and you’re at 120 they say, “Oh no you’re not overweight,” well you think, “Oh that’s a nice comfortable message. So I’ll just go – I’m right now you know. (man)

One of the women considered that there was a difference in how the family GP approached weight concerns for her when compared to her husband.

My husband and I we went to the same doctor for years. I was always the one that was targeted for weight-loss. (woman)

These comments illustrated how cultural representations, including during interactions with health professionals shape people's understandings of their weight (what 'health professional people say' and do).

Study participants also considered men to be less concerned about their health and less likely to seek medical care with the men reporting only seeking professional advice as a consequence of experiencing a significant health event.

It’s got to have some medical factor or something to jolt their mind to say, “Well I’ve got to do something,” (man)

These discussions about the gendered understandings of weight gain, experiences of living in a big body, interactions with health professionals and services were culturally and socially

driven, but all point to how embodied self-understandings shape choices with respect to weight loss management, including surgery.

Following weight loss surgery

The experience of having surgery and the changes experienced following surgery were also gendered for study participants. The changes discussed following surgery included improvements in physical function and capacity, changed food practices and ongoing challenges with their relationship with food. Some changes (physical function) were more easily incorporated into their sense of self than others. Weight loss surgery recipients reported experiences of stigma associated with having surgery.

Weight loss surgery: accepting responsibility or a source of shame?

In order to avoid the critical judgement of others as well as avoid unrealistic expectations of post-surgical weight loss women were much more likely to limit their disclosure of surgery to a few friends or only family. In contrast, it was the exception for the men not to have discussed their surgery openly. Study participants, who considered surgery as means of taking responsibility for their body, were openly criticised by family and friends with surgery considered an easy way to lose weight. This was particularly the case for women:

You know people said to me, “It’s a cheat’s way out”. I heard that from so many people, and I’d get fired up and I said, “Well at least I’ve done something about it.”

(woman)

In contrast, some of the men had openly discussed their surgery to pre-empt the assumption that their weight loss was due to other health concerns, such as cancer. This was particularly the case for men with public positions in the community. One of the men was astounded at the response he got to his initial post-surgical weight loss when he was still significantly overweight.

I no sooner lost the first couple of kilos and I had people coming up to me talking about anorexia and stuff like that. Which I was both offended and also slightly amused by the fact that – ‘cause I was still like you know 20 – over 20 stone, and you know people are saying well, “You’ve lost weight. You’re not” – you know – “got a health problem.” (man)

None of the women had chosen to disclose their surgery to avoid speculation about their general health nor reported public concern about their general health when they lost weight. The broad social and cultural understandings of weight loss surgery impacted men and women differently.

Changing food practices, but not the relationship with food

There was a lot of discussion during focus groups about what could be eaten, how they ate and when they ate. Unpleasant responses, such as reflux after eating too much or particular types of food served to enforce changes in food practices. While discussion focused on changes in food practices and how surgery enforced these changes, some women reported that surgery had not changed their relationship with food. This common experience for women was a source of surprise and concern as outlined by this woman when discussing their ongoing relationship with food following surgery:

Yeah, it stopped you eating too much, and that’s what I’m now right into working – I’m still battling – my mindset never went away with the operation [Agreement] ...It’s still there – that’s what I found – the same psychology’s still in my head. ... it’s not working for me, and I’m thinking, “Geez, that whole mindset is still there and it never went away.”

This problematic relationship with food that persisted following surgery was unexpected and an ongoing challenge for many women in this study.

We're not silly when we go into this procedure; we've done some research, we know what it's about ... But I guess no one really prepares you for the psychological stuff.

The, "Yes, you might not be hungry anymore but the habits are still there. (woman)

Only one of the men who had received surgery discussed the challenges he was experiencing with his ongoing relationship with food.

Becoming or transforming

Improvements to physical function and capability were reported by many study participants.

These included improvements in their capacity to engage in everyday activities, such as being able to walk to the shops, climb stairs and even putting on shoes with greater ease.

Importantly, these changes in their body's capability enabled study participants to engage in meaningful social practices.

I'm very, very active now. Where before I was – I thought I was reasonably active but I wasn't. I mean I play golf twice a week now, I sail. I've got six grandkids and we go to sports where I was never doing that before. (man)

These changes were valued by all participants who experienced them and were easily incorporated into their sense of self as they facilitated existing social roles and responsibilities.

Despite losing weight following surgery the process of renegotiating a new identity was not a straight forward process for some of the women who continued to see themselves as a 'fat person', selecting clothes that were too big to try on when shopping. This failure to experience a changed self-image following surgery was a source of some distress as this discussion between three women reflects.

Speaker A: They're still ongoing. The thing is that it's you know – that wasn't just because you moved from one stage to the other. I'm not – that's what I'm saying; it's an ongoing process. It's never going to end because it's ongoing.

Speaker B: A lot of the time it doesn't matter what weight you actually are, you're fat still in your mind.

Speaker C: Yeah to me I've been fat up here all my life. No matter what my scales say.

This ongoing negative self-evaluation or dissociation between the bodily changes they experienced and their sense of identity was not discussed by any of the men in this study. The different experiences following surgery for men and women in this study, particularly their responses to the stigma of surgery, problematic ongoing relationship with food and process of renegotiating identity indicate that the post-surgical support needs differ for men and women.

Discussion

Despite the difference in weight loss surgery rates between men and women (Welbourn et al., 2014) the factors that contribute to this difference are poorly understood. The differences have been attributed to greater numbers of women being classified as severely obese and the differences in appearance and representation concerns of women. Using an embodied approach this qualitative study examined the social and cultural processes pertaining to gender, the body and food practices with men and women who were waiting for or who had received weight loss surgery. We found complex gendered processes underlying the decision to have surgery and experiences of men and women following surgery.

In this study cultural representations shaped men and women's understandings of their bodies that were reinforced during their interactions with health professionals who themselves were not immune to these cultural representations and understandings. The differences were also bound up with embodied practices, such as sporting activities, employment and looking in a

mirror. These embodied experiences of their big bodies contribute to men and women adopting different approaches to ‘managing’ their big bodies that are reflected in weight loss surgical rates and may impact on support needs pre and post-surgery.

For women in this study their bodies and eating practices were more closely bound with their sense of self as reflected in their discussions about their unchanged relationship with food following surgery. Women also provided more individualistic explanations for their obesity, attributing their obesity to early socialisation experiences, particularly with respect to eating practices and these practices were bound into their sense of self (Temple Newhook et al., 2015). These findings are similar to existing studies that show women internalise a greater sense of guilt and shame associated with their weight and eating practices and are much more likely to refer to themselves, their eating habits and their weight in a derogatory manner (Bordo, 2003; Murray, 2010; Rich & Evans, 2005; Throsby, 2008; Trainer, Brewis, Hruschka, & Williams, 2015). The men in this study experienced less shame and different conceptions of responsibility for their big bodies (Lewis et al., 2011; Monaghan, 2008) with men more likely to attribute their obesity to situational influences such as injury, changes in employment or other social circumstances.

Men’s self-esteem and sense of self were less tied to their eating practices and the appearance of their bodies with men much less likely to report challenges about their relationship with food following surgery and more openly discussing their surgery with others. As has been found in previous studies a big body may be an asset and source of pride for some men, a positive sign of strength and masculinity (Monaghan, 2008; Monaghan & Malson, 2013; Temple Newhook et al., 2015), while women commonly experience their big bodies as a source of shame (Lewis et al., 2011). These gendered cultural and social expectations with respect to body size were reflected and frequently reinforced during their interactions with

health professionals. These different experiences and embodied self-understandings of living in a big body may contribute to the gender differences in rates of weight loss surgery.

Women in this study were much less likely to disclose their surgery to family and friends, in part because they were afraid of creating unrealistic expectations of weight loss following surgery and to avoid the negative evaluations of others who considered surgery the ‘easy’ way to lose weight. This carefully controlled disclosure of surgery by women may also be a consequence of the guilt and shame women associate with their weight and eating practices. Limiting disclosure about surgery has been found in a previous study into weight loss surgery (Throsby, 2008), but gender differences were not discussed. Because they felt less personally responsible for their obesity or did not experience the sense of shame reported by women, men were more comfortable revealing their surgery and reported that people were concerned that their weight loss following surgery was due to ill health. The restricted disclosure of weight loss surgery by women in this study has the potential to negate the sense of agency and acceptance of responsibility for their body commonly associated with the decision to have surgery (Temple Newhook et al., 2015; Throsby, 2008).

Studies of the experience of weight loss surgery show that it has been conceptualised as an opportunity for individual transformation (Temple Newhook et al., 2015; Throsby, 2008). The hoped for transformation extends beyond that of changes in bodily size or physical appearance (Temple Newhook et al., 2015; Throsby, 2008). In this study, some women hoped that surgery and the subsequent weight loss would change how they felt about themselves, but found that the negative self-evaluations associated with their big bodies remained, with many women still seeing themselves as ‘fat’ irrespective of actual weight lost. This experience has been reported in other studies of weight loss surgery (Alegria & Larsen, 2015; Natvik, Gjengedal, & Råheim, 2013; Throsby, 2008). In our study men did not discuss ongoing challenges with their sense of identity following surgery. However, it is not possible

to determine if the lack of discussion by men about any challenges associated with renegotiating their sense of identity following surgery reflected an absence of challenges or was a product of collecting data in focus groups rather than through individual interviews. Studies have found that men are less likely to discuss weight loss with other men (Temple Newhook et al., 2015). An interview study of Norwegian men undergoing weight loss surgery (Natvik et al., 2015) found that men also reported challenges when incorporating the changes into a new sense of self following surgery. A small but growing body of research shows that weight loss surgery and the subsequent changes in embodied practices along with the marked changes in body size and shape challenge the sense of self and identity for some individuals (Alegria & Larsen, 2015; Natvik et al., 2015; Natvik et al., 2013; Throsby, 2008; Young & Burrows, 2013). This study found that renegotiating one's sense of self and identity following weight loss surgery was a complex and gendered process.

In this study, men and women valued the change in the body's capacity following surgery and how this facilitated engagement in meaningful social practices Shilling (2012: 220) argues that body size, shape, appearance and experiences are integral to our sense of identity. In contemporary western society the body has value and technological advances have increased the options available for physical transformation (Monaghan, 2008; Shilling, 2012). Modifying one's body through surgery may best be understood as a means of taking control over one's situation, resulting from a desire to engage meaningfully with the world (Budgeon, 2003; Davis, 1995). The search for beauty, can be part of this process, but it is too simplistic to focus on this factor alone. Focusing on the body's capability and what it can do rather than what it means enables the decision to have surgery to modify the body to be viewed as more than just conforming to the appearance and representation concerns of femininity (Budgeon, 2003; Davis, 1995).

To date the assumption has been that the decision to undergo weight loss surgery, weight loss following surgery and any associated health impacts are experienced as overwhelmingly positive. However, there is a growing body of evidence that suggests the process of renegotiating a new identity and adapting to changing embodied processes, such as food practices and the ongoing relationship with food following surgery is extremely difficult for some people (Alegria & Larsen, 2015; Natvik et al., 2015; Natvik et al., 2013; Ogle et al., 2015; Throsby, 2008). This study highlights the gendered nature of these processes. These challenges and their gendered nature are not currently reflected in the pre or post-surgery care and support currently available for people undergoing weight loss surgery.

Conclusion

There are many gendered social practices that impact on rates of weight loss surgery and the post-surgical experiences of men and women. The efficacy of current pre and post-surgical care services could be improved by acknowledging the complex gendered social processes with respect to food practices, understanding of obesity, sense of shame and health service use that influence decisions to undergo surgery and the support needs of men and women. To maximise outcomes following surgery health services and supports need to give greater consideration to the way gender influences experiences for men and women pre and post-surgery.

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Table 1 Focus group participant characteristics

	Men	Women
	n=17	n=32
Age (years)		
Average	57.8	52.8
Range	35-70	24-73
Median	62	55
Education		
Year 12 or less	7 (41.2%)	13 (40.6%)
Certificate/Diploma/Trade	5 (29.4%)	12 (37.5%)
University	5 (29.4%)	7 (21.9%)
Time since surgery (years)		
Average	4.7	7.2
Range	<1 - 10	<1 - 31
Median	5	5.5
Surgical Funding Type		
Public	4	5
Private	11	24
Wait List	2	6